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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,736	09/27/2001	Gregory Alan Flurry	AUS920010571US1	7214
32329	7590	09/06/2007	EXAMINER	
IBM CORPORATION			DINH, MINH	
INTELLECTUAL PROPERTY LAW				
11400 BURNET ROAD			ART UNIT	PAPER NUMBER
AUSTIN, TX 78758			2132	
			MAIL DATE	DELIVERY MODE
			09/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s) <i>ma</i>	
	09/965,736	FLURRY ET AL.	
	Examiner	Art Unit	
	Minh Dinh	2132	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. This action is in response to the amendment filed 4/10/07.

***Response to Arguments***

2. Applicant's arguments filed 4/10/07 have been fully considered but they are not persuasive.

Applicant argues that Mishra does not teach the use of an aggregator token (see Remark, page 10, 3<sup>rd</sup> paragraph), wherein (i) the aggregator token is generated and sent to a client after its user has been successfully authenticated during a single-sign-on operation that is provided by the ASP aggregator service; (ii) the aggregator token then accompanies any request from the client to aggregated applications within the ASP aggregator service's infrastructure; and (iii) in various embodiments of the invention, the aggregator token comprises an indication of an address or resource identifier within the ASP aggregator service to which a client/user can be redirected when the client/user needs to be authenticated by the ASP aggregator service (see Remark, page 10, 2<sup>nd</sup> paragraph).

Mishra et al ("Security Services Markup Language") discloses that an aggregator token, i.e., a name assertion, is generated and sent to a client as part of an authentication response message after its user has been

successfully authenticated during a single-sign-on operation that is provided by the ASP aggregator service (page 4, definition of Name Assertion; pages 7-8, Section 3.1, Scenario #1: User-Driven Transactions (Single Sign-On); page 16, AuthResponse message).

Mishra also discloses that the aggregator token then accompanies a request from the client to an aggregated application within the ASP aggregator service's infrastructure, i.e., the name assertion is included in the user's request to access site B (pages 7-8, Section 3.1, Scenario #1: User-Driven Transactions (Single Sign-On)).

With respect to independent claims 1, 16 and 31, Mishra further discloses that the aggregator token comprises a logon resource identifier, i.e., the URI of the authentication engine which authenticates the user and issues aggregator token (page 12 and 16, see the <Issuer> tag within the <NameAssertion> of the authentication response from the authentication engine).

With respect to other independent claims, whereas Mishra discloses using the logon resource identifier to request the logon resource for further information regarding the authenticated user (page 8), Mishra does not disclose using the logon resource identifier for the purpose of redirecting users who need to be authenticated; however, this feature is taught by Gupta et al (6,226,752).

***Claim Rejections - 35 USC § 102***

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 3, 16, 18 and 31 are rejected under 35 U.S.C. 102(a) as being anticipated by Mishra et al ("Security Services Markup Language"). Mishra discloses a method comprising receiving from a client a request to access a resource protected by an application service provider (ASP) aggregator service, wherein the ASP aggregator service provides single sign-on functionality for a plurality of net-sourced applications, wherein at least one of the net-sourced applications is hosted by an ASP; in response to a determination that the client or a user of the client has not been properly authenticated by the ASP aggregator service for a current client session, requiring the client or the user of the client to successfully complete an authentication process (Section 3.1, Scenario #1: User-Driven Transactions (Single Sign-On)); and sending to the client a response to the request received from the client, wherein the response is accompanied by an aggregator token, wherein the aggregator token comprises the URL of an authentication engine that provides logon service (Section 3.1, Scenario #1: User-Driven Transactions (Single Sign-On); Section 4. 3, Authentication (Auth) and Authorization (Az) Services, pages 15-16; figure on page 29).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4-5, 17, 19-20 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra as applied to claims 1, 16 and 31 above, and further in view of Gupta et al (6,226,752).

Regarding claims 2, 4, 17, 19 and 32-33, Mishra does not disclose that the URL is that of a logon Web page. Gupta discloses a method for providing single sign-on service utilizing the URL of a login server as a redirection address and the login server is configured such that a login Web page is the default Web page for that URL (col. 12, lines 13-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Mishra method such that the URL of the login service is also the URL of a login Web page for redirection purpose, as taught by Gupta. The motivation for doing so would have been to facilitate user's login process since the browser automatically handles redirection without any interaction from the user.

Regarding claims 5, 20 and 34, Mishra discloses that an application service provider (ASP) receives a request for service accompanied with an aggregator token from a client and the ASP determines whether the user of the client has been properly authenticated (Section 4.4, Assertion Validity). However, Mishra does not teach what the ASP does if it is determined that the user has not been properly authenticated. Gupta discloses a method for accessing resource at an ASP protected by a login server providing ASP aggregator service. In particular, Gupta discloses that if the ASP determines that a user has not been properly authenticated, the ASP will send to the client a response indicating a URL of a login Web page at the login server as a redirect destination so that the user can be authenticated, and, upon successful authentication, the login server redirects the user's request accompanied by an aggregator token to the ASP (Abstract; col. 7, lines 1-15; fig. 3 and corresponding text). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Mishra method such that if the ASP determines that a user has not been properly authenticated, the ASP will send to the client a response indicating a URL of a login Web page at the login server as a redirect destination so that the user can be authenticated, and, upon successful authentication, the login server redirects the user's request accompanied by an aggregator token to the ASP, as taught by Gupta. The motivation for doing so would

have been that the process does not require any interaction from the user (col. 7, lines 19-23). Since the ASP needs the URL of the authentication engine that performs the login service to redirect the user's request and there are more than one authentication engine (figure on page 8), it would be obvious by the combination of Mishra and Gupta above for the ASP to extract the URL from the token so that the ASP knows which authentication engine the user's request should be redirected to.

6. Claims 6-8, 10-15, 21-23, 25-30 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra in view of Gupta.

Regarding claims 6-7, 11, 13-14, 21-22, 26, 28-29, 35-36 and 38, Mishra discloses that an ASP receives a request for service accompanied with an aggregator token from a client, the aggregator token being originated from an ASP aggregator service that provides single-sign-on functionality for a plurality of net-sourced applications, wherein at least one of the net-sourced applications is the net-sourced application hosted by the ASP (Section 3.1, Scenario #1: User-Driven Transactions (Single Sign-On); Section 4. 3, Authentication (Auth) and Authorization (Az) Services, pages 15-16). Mishra also discloses that the aggregator token comprises the URL of an authentication engine that provides logon service to a user (Section 3.1, Scenario #1: User-Driven Transactions (Single Sign-On); Section 4. 3,



Authentication (Auth) and Authorization (Az) Services, pages 15-16). Mishra further discloses that the ASP determines whether the user of the client has been properly authenticated (Section 4.4, Assertion Validity). However, Mishra does not teach what the ASP and the ASP aggregator service do if it is determined that the user has not been properly authenticated. Gupta discloses a method for accessing resource at an ASP protected by a login server providing ASP aggregator service. In particular, Gupta discloses that if the ASP determines that a user has not been properly authenticated, the ASP will send to the client a response indicating a URL of a login Web page at the login server as a redirect destination. Gupta also discloses that the login server receives the redirect request, requires the user to successfully complete an authentication process, extracts the identifier of the ASP from the redirect request and sends a response to the client indicating the identifier of the ASP as a redirect destination (Abstract; col. 7, lines 1-15; fig. 3 and corresponding text). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Mishra method such that if the ASP determines that a user has not been properly authenticated, the ASP sends to the client a response indicating a URL of a login Web page at the login server as a redirect destination and the login server receives the redirect request, requires the user to successfully complete an authentication process, extracts the identifier of the ASP from

the redirect request and sends a response to the client indicating the identifier of the ASP as a redirect destination, as taught by Gupta. The motivation for doing so would have been that the process does not require any interaction from the user (col. 7, lines 19-23). Since the ASP needs the URL of the authentication engine that performs the login service to redirect the user's request and there are more than one authentication engine (figure on page 8), it would be obvious by the combination of Mishra and Gupta above for the ASP to extract the URL from the token so that the ASP knows which authentication engine the user's request should be redirected to.

Regarding claims 8, 23 and 37, Mishra further discloses that the ASP determines the validity of the token (Section 4.4, Assertion Validity).

Regarding claims 10, 12, 15, 25, 27 and 30, Mishra does not disclose that the URL is that of a logon Web page. Gupta discloses a method for providing single sign-on service utilizing the URL of a login server as a redirection address and the login server is configured such that a login Web page is the default Web page for that URL (col. 12, lines 13-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Mishra method such that the URL of the login service is also the URL of a login Web page, as taught by Gupta. The motivation for doing so would have been to facilitate user's login process

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when the login server is configured with the username and password mechanism.

7. Claims 9 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra in view of Gupta as applied to claims 6 and 21 above, and further in view of McCarty et al (US Pub. No. 2002/0029269). Mishra does not disclose that access to the resource is controlled by the ASP on a subscription basis. McCarty discloses a method for accessing resource at an ASP using ASP aggregator service, the resource being controlled by the ASP on a subscription basis (paragraphs 0015-0016, 0055, 0067-0068). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Mishra and Gupta such that access to the resource is controlled by the ASP on a subscription basis, as taught by McCarty. The motivation for doing so would have been to present a seamless user interface as a user accesses different web-based external systems, while maintaining the independence of the external systems (paragraph 0012).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 7,137,006 to Grandcolas et al.

U.S. Patent No. 7,174,383 to Biswas et al.

U.S. Patent No. 7,231,661 to Villavicencio et al.

Samar, "Single Sign-On Using Cookies for Web Applications"

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

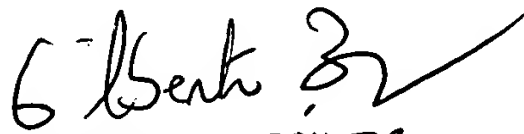
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MD/  
Minh Dinh  
Examiner  
Art Unit 2132

8/30/07

  
GILBERTO BARRON JR  
SUPERVISORY PATENT EXAMINER  
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